

APPENDIX C
USACE-EPA COORDINATION PLAN AND RELATED CORRESPONDENCE

This appendix contains the following documents:

- Minutes from a coordination meeting held December 6, 2005
- Minutes from a coordination meeting held April 7, 2005
- Minutes from a coordination meeting held April 28, 2005
- USACE Comments to EPA RI/FS Sediment Sampling Plan provided August 24, 2005
- Minutes from a coordination meeting held August 26, 2005
- Minutes from a coordination meeting held September 8, 2005
- Minutes from a coordination meeting held September 13, 2005
- Coordination Plan dated September 21, 2005

MEMORANDUM FOR RECORD

SUBJECT: Meeting with USEPA Region 2 Concerning the NRDC letter dated 24 Nov 04.

1. On 6 December 2004 members of the USACE New York District met with the USEPA Region 2 to discuss the NRDC letter of 24 November 2004 and to seek their recommendations on proceeding. The agenda is attached. The following persons attended:

USACE
Tom Shea
Scott Nicholson
Angelo Trotto
Richard Tomer
Beth Nash
Harold Hawkins
Adam Perlson
Jenine Gallo
Mike Millard
Ellen Simon

USEPA
Elizabeth Butler
Doug Pabst
Patricia Hick
Amelia Wagner

PANYNJ
Atef Ahmed

2. After reviewing the letter, we discussed various points. The following is a summary of the key points/conclusions of the meeting:

a. The area in question is a CERCLA study area, not a CERCLA site. The EPA is in the early stages of determining what studies are needed to determine the criteria and aerial extent for defining which sediments are characteristic of hazardous material and what remediation methods should be performed, if warranted. This is the purpose of their Feasibility Study/Remedial Investigation.

b. The EPA saw no reason for the USACE to stop any of its navigation projects.

c. The EPA would not comment on our need for additional NEPA documentation. They stated that this was a USACE decision to make. However, they stated that they would discuss the matter with their NEPA experts and have them contact us.

3. POC is the undersigned, tel. (212) 254-5570.


THOMAS J. SHEA, III
Project Manager

Corps/EPA Meeting to Discuss:
EPA CERCLA Study of Newark Bay and the NRDC Letter to COL Polo
6 Dec 05 @ EPA, 19th Floor

A. The EPA Study

1. What is a CERCLA Study Area?
2. What is the study area and what type of studies are being conducted?
3. How long is the study and what type of recommendations could be made?
4. What does this mean to the Corps with new and O&M work being performed in the Study area?

B. NRDC Letter

1. Review letter
 - Status Solicitation of S-KVK-2 issued, but four months or more before dredging starts
 - Status AK-2 District working bid protest but award by end of the month barring addition protest. It will most likely be Mar. before dredging started

2 Issues

- Claim that Dredging projects likely to exacerbate the imminent and substantial endangerment to human health.
- Claim that dredging activities will undermine the viability of the superfund remedial investigation.
- Claim that the dredging will delay or prevent an effective cleanup.
- Claim that dredging will create significant public liability

3. What do they want?

4. What are the impacts based on the discussion above.

C. Summary and Recommendations

1. What are our courses of action?
2. How should we proceed?
3. When do we schedule the meeting and who attends?

MEMORANDUM FOR RECORD

SUBJECT: Meeting with EPA and Tierra Solutions Concerning Sampling in Newark Bay

1. On 7 April 2005, I attended a meeting with the EPA and Tierra Solution (TSI) to discuss sampling and modeling in the Newark Bay Study Area (NBSA). Corps and EPA persons in attendance included:

Tom Shea	USACE Project Manager
Scott Nicholson	USACE Project Manager
Bryce Wisemiller	USACE Project Manager
Beth Nash	USACE Sediment Management
Elizabeth Butler	EPA Project Manager

2. Some key points discussed from a Corps perspective included:

a. The purpose of the meeting was to further discuss coordination with the HDP and the Newark Bay Superfund Study Area. The Corps' was present to identify additional resources, technical products and coordination that could support EPA's Newark Bay superfund study and to coordinate activities between the two efforts to insure that the navigation program did not impact or interfere with the sampling.

b. EPA said they were expecting to proceed with the sampling in the Fall with no dates set. It was clarified that earlier coordination had included the Corps providing dredging schedules to EPA for coordinating with the sampling schedule drafted by Tierra Solutions. At this meeting it was unclear if dredging operations would occur during the sampling.

c. Progress on EPA's review of the Draft Newark Bay Sampling Plan prepared by Tierra Solutions was discussed. They informed us that they were trying to complete the review in time for Tierra to do the sampling during the Fall. There was a general discussion about who was providing EPA technical support and comments on the plan. They said they had hired representatives from Malcolm Pirnie who are also working on the Lower Passaic River Project for the Corps and EPA and they were aware of our navigation program in Newark Bay. The Corps would continue to provide comments as the plan was refined.

d. The Corps offered to provide any information from the navigation program to EPA and Malcolm Pirnie that may include sampling results from earlier investigations that could further the superfund study of Newark Bay.

3. Discussion followed on the Newark Bay study area and comments on the sampling plan.

a. The study area was generally located between the Goethals and Bayonne Bridge's and Kearney Point. For the modeling, this would be extended up the Passaic River, the Hackensack River (to Oradel Dam) and include the Kill Van Kull and Arthur Kill.

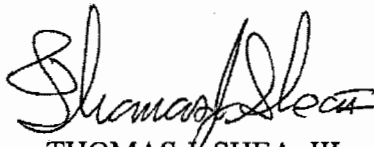
b. The Corps questioned the need to sample in the Channels based on the ideal that it was removing the bottom and side slopes in its new work construction. We also mentioned that if sampling was to take place near Bergen Point, coordination would have to be conducted with the Pilots and USCG, in addition to the Corps.

c. TSI may model the channels to 50 ft. However, the depths used for their modeling may vary based on that they are modeling for.

d. The Corps' suggested that EPA's technical team review historic maps available on a NOAA web site that would identify former dredged areas that had been abandoned and now filled in with sediments.

e. It was recognized that an additional meeting was required that would include our Operations (Monte Grege and Randy Hintz) and Engineering (Ben Baker and Steve Weinberg) to discuss additional comments on the sediment profiles and other data that the Corps may have.

3. POC is the undersigned at (917) 790-8304.



THOMAS J. SHEA, III
Project Manager

MEMORANDUM FOR RECORD

SUBJECT: Meeting with EPA and Tierra Solutions Concerning Sampling in Newark Bay

1. On 28 April 2005, I attended a meeting with the EPA and Tierra Solution (TSI) to discuss sampling and modeling in the Newark Bay Study Area (NBSA). Persons in attendance included:

Tom Shea	USACE Project Manager
Scott Nicholson	USACE Project Manager
Bryce Wisemiller	USACE Project Manager
Beth Nash	USACE Sediment Management
Elizabeth Butler	EPA Project Manager
Steve Weinberg	USACE Engineering
Ben Baker	USACE Engineering
Rick McNultt	Tierra Solutions
Paul Blumstern	Tierra Solutions
Ed Garvey	Malcolm Pirnie
Bob Romagnoli	BBI

2. The purpose of the meeting was to further discuss coordination after the April 8, 2005 meeting with the HDP and the Newark Bay Superfund Study Area. The Corps' was present to identify additional resources, technical products and coordination that could support EPA's Newark Bay superfund study and to coordinate activities between the two efforts to insure that the navigation program did not impact or interfere with the sampling.

3. EPA said they were still expecting to proceed with the sampling in the Fall with no dates set. It was clarified that earlier coordination had included the Corps providing dredging schedules to EPA for coordinating with the sampling schedule drafted by Tierra Solutions, Inc. (TSI). It was also classified that the sampling was being conducted by a TSI contractor.

4. Some key points discussed from a Corps perspective included:

a. It was recognized that additional data from the Newark Bay Confined Disposal Facility EIS (NBCDF EIS) was needed. A point of contact at the PANYNJ was provided. Ben Baker agreed to check for any geotechnical data he may have on or around the NBCDF

b. The Corps discussed its historic sampling techniques, and made a comparison between stratified and composite samples.

c. Bryce Wisemiller explained about Corps sampling and testing procedures for navigation projects. In general, the geological strata are identified and sampling points are identified based on coordination with state and federal agencies (just states for non-HARS

material). Samples are taken down to the proposed limit of dredging and then tested. Tests include raw sediment chemistry, bulk chemistry for processed dredged material and multi-batch leachate. The samples are also composited with about two to three cores to a composite, generally.

d. The Corps advised that there may be some maintenance dredging in the fall in the Port Elizabeth and Pierhead Channels. The sampling may or may not be completed when this occurs. The coordination during HDP construction was discussed including the development of a phone chain between the dredging operations and the sampling efforts in Newark Bay by EPA.

e. We commented on the historic development of Newark Bay using NOAA charts. NOAA has charts going back to 1866 and an analysis will show presently unused channels, piers, etc. Three specific sites were identified looking at the NOAA charts that were former channels that were abandoned and now shoaled in. These were identified as prime areas for sampling since the sedimentation occurred during the periods when contaminants were released into the system.

f. The Corps will be awarding a contract for the removal of some utilities in the Arthur Kill. This may provide some recently deposited sediment for NBSA testing

3. POC is the undersigned at (917) 790-8304.


THOMAS J. SHEA, III
Project Manager



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

REPLY TO
ATTENTION OF

Harbor Programs Branch

August 24, 2005

Ms. Elizabeth Butler
Remedial Project Manager, Newark Bay
U.S. Environmental Protection Agency, Region 2
290 Broadway
New York, NY 10010

Dear Ms. Butler:

As discussed with you previously (see attached Memorandums for Record) and as recently requested, this letter provides our summary comments to the draft Work Plan related to the EPA CERCLA Newark Bay Study Area (specifically Volume 2a of 3 of the RIWP and the June 2004 TSI Response to Comments, dated May, June and August 2005). These comments reflect several members of the New York District, US Army Corps of Engineers (USACE) review of the current draft Work Plan, especially the sampling plan. Please see the attachment to this letter for the comments.

We also wish to note that the coordination meetings held with you, your consultants and TSI in April, provided substantial amounts of information to you related to the nature of the sediments to be dredged from the deepening of selected navigation channels in the southern half of Newark Bay, bathymetric data on these and other maintained navigation channels in the Bay, and on biological data collections and analysis performed on the sediments in various areas of Newark Bay has been useful to you in your RI/FS. We remain committed to continue to provide your office all information related to our various programs that may be of use in your RI/FS of Newark Bay.

In addition to the comments in the attachment and based on our general understanding of the plans for the Phase 1 sampling in Newark Bay (as described in the draft Work Plan and as relayed by email from you on August 16, 2005 to Mr. Thomas Shea of the New York USACE), we also wish to confirm our initial understanding that potential impacts of our ongoing maintenance and deepening program can be avoided through our understanding of your program and continued coordination. If your office has a different view or concern on any of the statements below, please contact our office as soon as possible so that we may develop plans so to avoid any significant adverse impact upon your sampling effort.

a. The EPA is expected to receive from TSI on or about September 6th the revised Work Plan for the Newark Bay RI/FS, which includes the Phase 1 sampling effort. The EPA is scheduled to approve this plan on or about September 16th. The intent of Phase 1 sampling is to gather preliminary baseline data related to the four goals established in the AOC for the RI/FS. Phase 1 will consist of three data collection efforts: 1) current bathymetry of the study area (planned to occur in October 2005); 2) Biological Activity Zone (BAZ) sampling (also planned to occur in October 2005); and 3) sediment contaminant coring and analysis (planned to occur in November-December 2005). EPA will use this data and analysis to determine its next steps.

1) Regarding the bathymetry data collection, in areas in which we are or plan to be dredging, we can or have made available to you or your consultants, pre and/or post multi-beam surveys of the areas dredged. Given the relatively dense data generated by multi-beam surveys, this should provide better bathymetry

data for the dredged areas of the Bay than what your data collection effort would otherwise. Further, since this and past survey data can help to quantify and localize sedimentation patterns in the Bay, the bathymetry data from our dredging program should have a substantial positive effect on establishing the baseline conditions for the RI/FS and the accomplishment of its goals.

2) Regarding the BAZ sampling, we have provided to your office recently documented biological data from samples from approximately a dozen years ago. This information, combined with the information that will be collected this fall should help to establish not only a baseline but also a trend in the biological benthic conditions that exist in the Bay. Given the relatively low levels of sediment resuspension from the USACE' environmentally protective dredging operations in the Bay and based on our extensive experience and studies, we believe that our continued dredging operations will not adversely interfere with this sampling effort. Of course, given the nature of dredging, samples planned for inside the affected federal channel boundaries may be affected by the obvious disturbance of dredging which has been recently performed or is underway. Should EPA wish to take BAZ samples within the "active" navigation channels, we will coordinate our dredging program to avoid any adverse interference with the BAZ sampling effort.

3) Regarding the sediment coring and analysis effort of the Phase 1 RI/FS, we understand that these cores will be taken to two different depths, 3.5 feet and 6.5 feet, with contaminant analysis performed on the first 6 inches, then every foot thereafter. As noted earlier, we believe that this arbitrarily predetermined depth may be wholly insufficient in selected locations of the bay (see para b. on page 1 above). Further, the locations (particularly as noted in para b. on page 1 above), may be better refined once the bathymetry data collection is completed so thought may be given towards slightly adjusting these locations just after the bathymetry data is collected but prior to the corings being taken. Because the deepening dredging that has been done and is now underway will obviously affect the cores in the channels, we continue to question its utility (as commented in para a. on page 1 above). However, for cores taken outside the dredged areas, our analysis and past experience indicates that the sediment deposited off-channel from the dredging operations will be negligible compared to the vertical resolution of the analysis being performed. Moreover, past comparisons of contamination levels of the silty, recently deposited surficial material in our deepening contracts indicates that it is remarkably similar to the surficial sediment contamination that exists in the sediments outside the HDP boundaries.¹ Nevertheless, we understand that just prior to the Phase 1 sediment sampling, that EPA and the USACE will coordinate on the precise locations of samples to be taken so that we can coordinate with our dredging contractors to ensure that our effort does not interfere with the sampling effort. The USACE and EPA will set up a meeting that will include their contractors to discuss communications protocols during the sampling in order to minimize impacts to the sampling. It should be noted that Phase 1 cores samples taken in the "active" federal channels, where dredging is currently occurring or where dredging is expected to occur in the near future, that the recently deposited, silty surficial sediments may not physically be there (in terms of stratum) for the Phase 2 sampling. We view the safe and protective dredging, treatment and use of these sediments to remediate impacted upland sites in the Port region as providing considerable environmental benefits to the region beyond the economic benefits related to the improvement of the navigation channels.

b. Phase 2 sampling will be based on the data analysis conducted from the Phase 1 sampling and is not expected to begin until 2006. As you know, we would appreciate receiving as soon as is practicable a more detailed schedule of any and all sampling in the RI/FS effort so that the USACE can analyze any potential (or theoretical) adverse impact or interference that our planned dredging may have on this sampling.

¹ CENAN-PP-H MFR dated 22 March 2005.

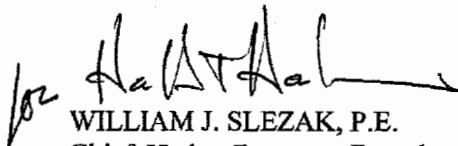
c. EPA's future biological sampling is expected to occur in the spring and again in the late fall of 2006. The USACE will continue to provide EPA with all of its biological sampling data collected for the deepening projects. As noted above, our preliminary analysis indicates that our continued deepening effort should not interfere with the planned RI/FS biological sampling, except for samples within the recently dredged/disturbed channel areas.

d. EPA was not sure when it will begin its water quality sampling planned as part of the Phase 2 sampling effort. Again, the USACE will provide its data to the EPA and is committed to work with the EPA to ensure that our continued deepening program does not adversely interfere with your RI/FS sampling effort.

e. EPA will also conduct sampling in and near Combined Sewer Outfalls (CSOs). We understand that you expect this some time in the future and do not foresee any impacts to occur because of our dredging since we are dredging so far away from the CSOs.

In closing, we wish to once again pledge our commitment to work with the EPA so that our respective efforts in the Newark Bay can proceed concurrently and in a complimentary manner. If we, both EPA and USACE, believe that no other alternative is possible and that some USACE activity is likely to interfere with your study sampling effort, we will direct our contractors away from the sampling to avoid the interference. Given the obvious magnitude of these two efforts and their potential future positive impact to this region (environmentally and economically), it is incumbent upon both our agencies to make every effort so that each can proceed as quickly and efficiently as is possible.

Should you wish to discuss this matter further or should you wish to arrange a meeting between our offices (possibly to establish a periodic, regular meeting to coordinate the two efforts), please contact Mr. Thomas Shea, the Project Manager for the USACE 50 foot Harbor Deepening Project, at (917) 790-8304.


WILLIAM J. SLEZAK, P.E.
Chief, Harbor Programs Branch

CF:

Ray Basso, EPA

Alice Yeh, EPA

Ellen Simon, USACE

Bryce Wisemiller, USACE

Scott Nicholson, USACE

USACE Comments to EPA RI/FS Sediment Sampling Plan

a. Tierra Solutions, Inc (TSI) has proposed a large number (20 out of 60) of sampling points that are located in the navigation channels in the southern half of Newark Bay that have been recently or are currently being deepened. We note that these areas have been recently dredged to a depth where the exposed sedimentary deposits are of pre-industrial age and consequently have not been exposed to long term sources of contamination. USACE considers these channels to be well characterized and suggests that many of the sampling locations be relocated outside these dredged channels to other areas, ones that have not been analyzed as frequently. USACE understands the need to get a historic view of the contamination. However, including areas which are known not to have contamination not only wastes limited resources but also implies a potential contamination problem exists in areas that we know, through our thorough and well reviewed sediment testing data, do not have extensive sediment contamination (beyond that which deposits in the channel bottom from off-channel sources).

b. Related to the primary goal of the RI/FS as we understand it is the need to identify and determine the horizontal and vertical distribution and concentration of various contaminants in the Bay. As relayed to you and to TSI in April and related to this goal, we continue to advise that three general locations are primary importance for performing deep sediment sampling (well beyond 6.5 feet potentially). They are locations that, based on historical and, to some extent, recently collected information, appear to be areas of high amounts of sediment deposition through the period in which the pollution occurred in the north, middle and southern portions of Newark Bay. The USACE suggests sampling in these areas, at least to a depth of the Pleistocene-Holocene layer (about 24 ft in one location) instead of the suggested 6.5 feet to determine the historic extent of contamination. During our meetings in April 2005 and most recently in August 17, 2005, the USACE identified to you on a navigation chart the three suggested sampling locations. The attached slides show prime specific locations for consideration in placement of these deep cores.

c. Related to comment b., above, the Newark Bay CDF EIS sought to identify areas of minimal sediment contamination thickness. Rather than sample near the CDF or the 2S/2N sites, samples should be taken in the areas outside of these sites where the thickest contamination was thought or considered to exist, based on the analysis performed during the EIS effort.

d. To our knowledge, the highest level of dioxin contamination measured in Newark Bay occurred along the northern bulkhead in Port Newark. We understand from anecdotal communications that this was the area that was used to load Agent Orange during the Vietnam War period. Further, we understand from the Port Authority of New York and New Jersey (PANY/NJ), that this area has not been maintenance dredged recently. As such and given the previous, relatively high levels of dioxin contamination found along this berthing area, we suggest that further samples be taken in this area and that EPA coordinate this sampling effort with the PANY/NJ to determine the areas of greatest likelihood of having sediments deposited in the past several decades.

e. Related to comment a. above, TSI proposed "grouping" of sediment samples as shown on Figure 6.1 should be revised to better reflect the actual distinctions in the channels, that being to distinguish the northern, unmaintained/deepened channels from those in the southern half that have and are undergoing regular maintenance and deepening. Currently, the figure distinguishes by color the "Port Channels" from the "Navigation Channels" but does not distinguish, except by a line, the northern "inactive" channels from the southern, "active" channels. We consider the east/west distinction (*i.e.* Port vs. navigation) to be far less relevant to the RI/FS effort than distinguishing the southern, "active" federal channels from those in the northern half of the Bay that have not and are not likely to be maintenance dredged (much less deepened) in the foreseeable future.

f. For the hydrodynamic modeling that is currently planned by EPA's consultants (under contract with the USACE's Kansas City District), we note that the selected modeling period for the Bay is the same time period that the USACE has performed substantial channel deepening, both in the Bay and in the Kill Van Kull leading into the Bay. This could very well lead to modeling results that are at least very difficult and at worst impossible to prove conclusively whether if and when the remedial action phase of the study is reached. Rather, modeling runs used for baseline analysis should assume either that the deepening has not yet begun or, better still, that the deepening dredging has been completed, because that is the expected end state of the Bay. That being said, we understand, though that to characterize the dynamic nature of sediment transport in the Bay that modeling runs made during channel deepening may provide useful information.

MEMORANDUM FOR RECORD

SUBJECT: Coordination of Continued Harbor Deepening Activities in Newark Bay with EPA's Sediment Sampling and Source Selection Identification Program under the Newark Bay CERCLA Study

1. A conference call was held this morning on the subject topic. The purpose of the meeting was to further discuss coordination with the HDP and the Newark Bay Superfund Study Area. The Corps' was present to identify additional resources, technical products and coordination that could support EPA's Newark Bay Superfund study and to further coordinate activities between the two efforts to insure that the navigation program did not impact or interfere with the any proposed sampling efforts. Progress on EPA's review of the Draft Newark Bay Sampling Plan prepared by Tierra Solutions was discussed. The following individuals were involved:

- Elizabeth Butler, USEPA Region 2, Project Manager of the Newark Bay RI/FS
- Len Warner, Malcolm Pirnie, Technical PM to EPA on the CERCLA Passaic River and Newark Bay Studies
- Ed Garvey PhD, Malcolm Pirnie, Geo- Chemical Scientist and Technical Consultant to EPA on the CERCLA Passaic River and Newark Bay Studies' sampling workplans
- Bryce Wisemiller, New York District, USACE, Project Manager
- Scott Nicholson, New York District, USACE, Project Manager

2. The Malcom Pirnie ("MP") consultants explained that three methods of sampling were planned for the Phase 1 sampling to be performed later this fall and possibly winter: bathymetry, biological activity zone (surficial sediment profile photographs and surficial sediment grab samples), and sediment cores. Based on the extensive previous technical information provided by the Corps to EPA and MP, the MP technical consultants concluded (for the reasons listed below) with EPA's concurrence that after reviewing dredging activities in the Newark Bay study area, that none of these Phase 1 sampling actions would, in any significant manner, be interfered with or affected by the ongoing dredging activities of the Corps in Newark Bay. This again confirmed the Corps' initial understanding from previous meetings and documented in a recent letter to EPA (dated August 24, 2005). Specifically, related to each of these methods of sampling, the following was discussed.

- a. Sampling Method 1 – Bathymetry: MP confirmed that the bathymetry data collection equipment (sonar) and subsequent results are not affected by dredging operations, and bathymetry data easily can be collected around the operating dredging equipment. In addition, as noted in a separate recent letter to EPA dated August 24, 2005, the Corps had offered to augment the bathymetry data collection by providing the bathymetry surveys taken in the Corps' contract areas before and after dredging operations were performed.

CENAN-PP-H

SUBJECT: Coordination of Continued Harbor Deepening Activities in Newark Bay with Sampling Planned under EPA CERCLA Study

- b. Sampling Method II – Biological Activity Zone: This sampling involves the collection of either a profile photograph of the sediment water interface and/or the collection of surficial sediments to identify the type and depth of organisms living within the sediments at that location. Since this community of organisms and this zone are established over time, and therefore tolerant of existing background conditions within the bay, they are not affected by resuspension caused by dredging (which we know is less than existing background conditions), except in the specific area being dredged. For their sampling, MP and EPA know of no area actively being dredged during the Phase 1 sampling this fall and winter where these samples would be taken. Nor, indeed, would there be any value in taking such samples. Consequently, EPA and MP stated that they did not see any interference or impact of the Corps' ongoing dredging operations on EPA's sampling in these areas.
 - c. Sampling Method III – Sediment Coring: MP explained that since the natural processes (storms, river flow, etc.) and human-related processes (e.g., passing ships, dredging operations, etc.) were relatively continuous over long time periods in which the sediments they plan to collect were deposited, that the continued dredging operations would not affect this sampling due to the relatively low deposition rates measured within the bay (i.e., dredging would be a negligible affect) and the very localized affect of dredging operations. In other words, there is no additional sediment resuspension from dredging activities which would affect the results of the sampling.
3. The MP consultants also discussed whether the dredging would interfere with the chemistry of Newark Bay and consequently the Superfund study remedial investigation. Based on their extensive review of technical data provided by the Corps and other technical information gathered on the investigation, they have concluded that the effects of the dredging operations are an inconsequential component of the overall baseline chemistry in the Bay and would not affect sampling results carried out under the Newark Bay Study plan. In other words, according to MP, dredging will not result in any adverse affects on the exiting background conditions of the bay to the extent it would have an adverse affect upon the RI/FS. Moreover, MP and EPA view the dredging in the bay as a benefit in that it will remove existing contaminated sediments from further exposure.
4. Since part of the planned sampling effort did involve areas within channels, the parties agreed that a coordination plan for how vessels (e.g., dredges, sampling vessels) may be moved, if and as necessary, could easily address any issues related to having separate dredging and sampling vessels in the same geographic area at the same time. Further, this plan will also incorporate coordination actions to best select the specific locations of the sediment corings (based on the status of the dredging operations and the extensive information the Corps has on the sediments in the dredging contract areas).

CENAN-PP-H

SUBJECT: Coordination of Continued Harbor Deepening Activities in Newark Bay with Sampling Planned under EPA CERCLA Study

EPA mentioned that this plan was under development and would be completed after the Phase 1 sampling plan was approved in September but prior to the sampling occurring thereafter. Because of this, MP and EPA agreed that the sediment core sampling would not be interfered with by the continued Corps dredging operations in the Bay. A subsequent coordination meeting between the Corps Construction offices and the EPA, MP and possibly Tierra Solutions Inc. was tentatively scheduled for the morning of 8 Sep 05 at the Corps' Construction field office in Caven Point, New Jersey.

5. EPA and MP also mentioned that no water column sampling was planned for this year. There was discussion that the methods had not been established yet for the Newark Bay system and were being developed on a trial basis under the Lower Passaic Study with the technical advisory committee. After the Lower Passaic Study trial is complete, then the Newark Bay, Water Quality sampling plan would be drafted. They expected it would not be developed until spring of 2006 and the Water Quality sampling in Newark Bay would not be performed until later in 2006 and possibly not until Spring 2007. The Corps requested that EPA and MP provide as soon as possible any plans and general methods and approaches for this type of sampling so to ensure that the Corps could evaluate them when they are completed with ongoing dredging operations in the Bay so that it does not have any interference with or impact upon the sampling.



BRYCE WISEMILLER
Project Manager, CENAN-PP-H



SCOTT NICHOLSON
Project Manager, CENAN-PP-H

MEMORANDUM FOR RECORD

SUBJECT: Coordination Team Meeting for USACE and EPA Activities in the Newark Bay Study Area.

1. The Newark Bay Study Area Coordination Team met on 8 September 2005 at the New York District. The attendance list and agenda are attached.

2. The goals of the meeting were:

- a. Ensure all parties understand each others' activities within the NBSA.
- b. Determine if the Corps' dredging has any impacts on the EPA Sampling Plan and to identify mitigation or avoidance strategies to minimize the impacts.
- c. Identify points of contract for sampling, dredging, and monitoring activities.
- d. Review and understand key points in the Coordination Plan.

3. The following is a summary of the items that were discussed:

a. The USACE construction contract procedures were explained in order to identify key points where additional coordination may be required or better conducted. These included the publishing of the Plans and Specifications for bidding, the bid opening, the bid evaluation period prior to award, contract award, review and approval of required plans (safety, environmental, etc.) and the Notice to Proceed. A pre-construction workshop is held roughly 3 weeks after a bid is accepted and USACE suggested that EPA, TSI and MP may want to attend this. USACE also suggested that the group may want to be included in the monthly/weekly Harbor Ops Committee meetings with the USCG and Pilots.

b. Malcolm Pirnie (MP) explained the rationale behind the need to collect samples in the navigation channels. The purpose of this sampling is to characterize the sediment load in Newark Bay and identify where it comes from. By obtaining a recent record of deposition, EPA hopes to explore sediments that were recently transported as suspended material and are currently contributing to deposition in the Newark Bay Study Area.

c. USACE then explained where they have dredged in the past and where they will in the future. These specific, contract drawings, which show the contract acceptance areas and limits, were reviewed with EPA, MP and TSI during the meeting:

Kill Van Kill: The northern portion of the channel was dredged approximately one year ago. The Contract Area 4B was completed approximately 3 weeks ago. Contract Area 4B contains the NBSA RI/FS sample point 004 (as labeled in the NBSA RIWP – Rev 0). Sample point 004 appears to be near Shooters Island. If the sample point is within the limits of the channel, then the silt has been removed as part of Contract Area 4B. If outside of the channel,

CENAN-PP-H

SUBJECT: Coordination Team Meeting for USACE and EPA Activities in the Newark Bay Study Area.

there should be no problem with the sample. The southern half of the channel has not been dredged yet and the USACE recommends that this area be a high priority in the sampling sequence. The area where sample point 005 is located was also dredged during Contract Area 5 dredging, which was completed about one year ago. USACE believes that sample point 050 will not be impacted since it believes that it is located on the flats near Shooters Island.

Arthur Kill: The area near sample point 001 was dredged in the last three months. USACE recommended that the sample be taken in acceptance Area F, which is east of the sample point. USACE expects dredging to begin in acceptance Area F in the next few weeks. It was noted that Area F contained higher levels of contaminants relative to nearby areas, such that this area exceeded NJ's upland criteria and will be disposed instead at Fresh Kills. Other acceptance areas that have not been dredged in the AK include Areas G and C (which has a no dredging allowed period for six months beginning 1 Feb). The USACE also expects to begin removing utilities in Utility Option Area 1 in mid-October. The removal of the utilities may disturb the sediment such that TSI may want to sample there prior to utility work. USACE also suggested that TSI may want to consider taking a few samples south of the Goethals Bridge. There are several areas there that have not been dredged and could provide useful information. The USACE currently has a Maintenance contract out for bid that will remove shoals in the Arthur Kill south of the Goethals Bridge. Contract award is expected in mid-September. The USACE does not expect to remove the shoals in the contract that are near the Goethals Bridge area due to funding. The option of moving an AK sampling point to a location south of the Goethals Bridge was discussed.

d. The group agreed to have a smaller group meet at USACE at 0900 hrs, 13 September 2005 to discuss the contract areas and sampling points in more detail.

e. EPA briefed that their sampling was still scheduled for October and November 2005. Phase 2 sampling is not yet known since it is based on the Phase 1 sampling. Biological Sampling will focus primarily on the flats area.

f. EPA stated that they had received the Sampling RIWP, Rev 1 from TSI and that it was posted to PREMIS. TSI stated that there were no major changes to the plan relative to sampling of the navigation channels. A copy was provided to the USACE and is posted at:

P:\N___ Letter of I___\EA Amendment Documents\RI - FS from EPA 8 Sept 2005\Volume 2 - Investigation Work Plan

P:\N___ Letter of I___\EA Amendment Documents\RI - FS from EPA 8 Sept 2005\Volume 3 - Health and Safety Contingency Plan

g. Dredging in Newark Bay is scheduled to go out for bid in November with contract award anticipated in mid-February and dredging anticipated in Spring '06. Joe Olha noted that the USACE has conducted maintenance dredging in the Port Newark, Pierhead, Elizabeth and Newark Bay channels in the past, and that future O&M dredging is scheduled for March '06,

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which could last from 1-4 months. Mr. Olha will provide additional information at the meeting scheduled for next week. USACE reiterated that it does not see a difference between the channels mentioned above, while TSI has grouped the first three as separate channels than the main channel since USACE has performed new work and maintenance dredging in all of the channels.

h. A brief discussion was held on the sampling and data collection to be done by the NRDA Trustees. At this time, they have not made any decisions on how to proceed with their data collection to build their case.

i. TSI agreed to provide USACE in electronic format with coordinates of the sampling locations so that they could be overlaid with dredging maps to better define the exact locations relative to dredging areas.

3. POC is the undersigned at (917) 790-8304.


THOMAS J. SHEA, III
Project Manager

Newark Bay Study Area
Corps-EPA Coordination Team Meeting

8 September 2005

26 Federal Plaza, USACE Executive Conference Room, Room 2115
Or via telephone: 1-877-931-3686, Participant Code: 554508#

Goals and Agenda

Goals:

- a. Ensure all parties understand each others activities within the NBSA.
- b. Determine if there are any impacts to the EPA Sampling Plan by Corps dredging and identify mitigation or avoidance strategies to minimize the impacts.
- c. Identify points of contract for sampling, dredging, and monitoring activities.
- d. Review and understand key points in the Coordination Plan.

Agenda:

Opening Remarks	Shea/Butler
Introductions	Shea
Construction Update and Coordination with Sampling	
Overview of Corps process from Award to physical construction	Hawkins/Shea
Current and future work in the AK	Conetta/DiDato/Leach
Current and future work in the KVK	Conetta/DiDato/Leach
Future work in the NB	Hawkins
RI/FS schedule update	Butler
Discuss receipt of the final sampling plan	Shea
Highlight critical changes	TSI
TSS/Turbidity Monitoring Program (outline goals and schedule)	Pinzon/LMS/ERDC
Communications Strategy	
On-water contractor to contractor	Shea
Scheduling of sampling near dredging contractors	
Coordination with USCG	Morton
Status update of O&M work in the NB	Olha
Status of Permitted work in the NB	Tomer

Agency Only:

Review and agreement to the Coordination Plan (attached)	Shea
Discuss the analysis (and schedule) that will be performed for the amendment to the DEA to identify potential impacts from dredging to the EPA study	Pinzon/Glaser

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MEMORANDUM FOR RECORD

SUBJECT: Additional NBSA Coordination – Sediment Sampling Points

1. An additional coordination meeting was held on 13 September 2005 at the USACE office to discuss the RIWP sediment sampling points and their relationship to the dredging construction contracts in more detail. The following persons attended:

Mike Millard	USACE	Project Manager
Patricia Donohue	USACE	Project Manager
Joe Ohla	USACE	Project Manager
Jenine Gallo	USACE	Environmental Team Leader
Steve Weinberg	USACE	Engineering Team Leader
Ron Conetta	USACE	Construction Resident Engineer
Adam Perelson	USACE	Physical Scientist
Beth Nash	USACE	Environmental Engineer
Elizabeth Butler	USEPA	Remediation Project Manager
Len Warner	Malcolm-Pirnie	Project Manager
Bob Romagnoli	BBL	Project Manager
Rick McNutt	Tierra Solutions	Remediation Manager
Paul Bluestein	Tierra Solutions	Project Manager

2. The sampling plan for the EPA project was evaluated in relation to past and future dredging work. The plan may need adjusting dependent on when the Arthur Kill and Newark Bay areas were last dredged and when they will be dredged in the next six months. The following is a list of Corps deliverables to be sent to Elizabeth Butler of EPA and Bob Romagnoli of BBL to aid them in re-evaluating whether a few minor adjustments to five points (newly labeled # 001, 006, 008, 010, and 011) are necessary.

- Newark Bay Dredging History:

- New work (deepening) – provided by Steve during the meeting
- Maintenance- The last dredge area in Newark Bay was provided by Patricia Donohue during the meeting, additional historic information will follow. It was determined based on the dredging history that the sampling locations identified in the channel should be OK due to amount of time that has lapsed since last dredged and high sedimentation rates in particular areas.

- Future dredging in the next 6 months:

- New Work, Deepening – north of Shooters Island by Sept. 30th and Area F as early as Mid – October. The upland material is currently scheduled to be completed by December.

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SUBJECT: Additional NBSA Coordination – Sediment Sampling Points

- Maintenance- Newark Bay: the selected contractor could sample Mid December to February with dredging of Port Newark and Port Newark Pierhead channels in mid-March to June. This is dependant on resolution of legal issues.

- Maintenance Arthur Kill: Joe Olha to provide sampling and dredging time frame.

3. Follow-up actions include:

- FAA circular and guidance when doing work near the adjacent airport- to be provided by Patricia Donohue.
- Arthur Kill most recent conditions survey located south of the Goethals Bridge to show shoaling – to be provided by Joe Ohla.
- A map of the utility removal area that is currently contracted. A CD of maps was provided by Steve Weinberg during the meeting. Steve also agreed to provide TSI with a point of contact at PSE&G to assist in locating utilities. (NOTE: CD is rather dated, as it predates the removal and replacement of utilities in lower NB and the AK.)
- Pre-dredge survey of the Arthur Kill deepening – provided by Mike Millard
- Overlay map of the sampling points and dredging areas, this was requested by Tom Shea; Steve Weinberg stated that he had someone working on it. NOTE: TSI also asked that the location of utility crossings be included on the overlay.
- Jenine stated that Ron Pinzon would provide biological data mentioned at the 9/8 meeting to TSI.

It was agreed to have these items sent to Bob and Elizabeth by the end of the week, so that the sampling plan can be finalized.

4. At the 9/8 meeting the sampling points were referred to as listed in RIWP Revision 0. However, since TSI submitted RIWP Revision 1 on 9/6 with re-numbered sampling points, the new numbers are included here with explanations of changes where re-numbering occurred. Based on the additional information and clarifications provided by USACE on areas recently dredged and to be dredged before early November, some of the sampling points were proposed to be relocated as indicated below:

- #001. Current location in AK 2 was dredged in last 3 months; proposed to be relocated to just South of Goethals Bridge. Joe Olha of OPs Division stated that the area from the Goethals Bridge south to the Outerbridge was probably last maintenance dredged in the late 1990s, specifically the shoal areas were done in the 1997-1998 timeframe. The precise sample location will be dependent on the shoal locations in this area. Area F was considered for this point, however with a mid-October start date for dredging that area was dropped from consideration. Joe will provide information on historical maintenance dredging in this area.

- #002 and 051 (renumbered to 010 and 011). Current location of these points in AK 2 has not been dredged yet: proposed to be relocated into the AK 2 utility area 1 (east of Port Ivory and Bridge Creek), as the option for the dredging in this area is not expected to occur before

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SUBJECT: Additional NBSA Coordination – Sediment Sampling Points


- 2006. Final locations to depend upon shoaling (to be provided by EN). The utilities are inactive; USACE is going out for bid soon but does not anticipate dredging until December.

- #004 (renumbered to 008). Current location in AK 2, represented as the Shooters Island Option Area 1, has not been dredged yet; developed a contingency plan to relocate this point to south of Shooters Island if this point cannot be coordinated with dredging work by DonJon (dredger). This area has not been dredged since '97 but dredging will begin by 9/30. USACE will determine if enough material for Fresh Kills can be obtained from this general area without removal of this sample, thereby avoiding this location until the end of the AK2 dredging.

- #005 (renumbered to 006). Current location of this point in the KVK may have been dredged; proposed to be relocated slightly north into contract area 5, if necessary, since the southern portion of the Kill van Kull was recently dredged and contract area 5 has not been dredged in 2-3 years.

5. EPA confirmed that they will begin their sediment coring on or about 7 November. They prefer not to sample past mid-December due to health and safety concerns for the field crews. The USACE noted that they have conducted various types of sampling during the winter with no problems.

6. POC is the undersigned at (917) 790-8304.



THOMAS J. SHEA, III
Project Manager

Newark Bay Study Area Coordination Plan

pertaining to

US Army Corps of Engineers Dredging Activities in the
Newark Bay, Kill Van Kull and Arthur Kill

and the

US Environmental Protection Agency's Remedial Investigation and
Feasibility Study of the Newark Bay Study Area

Prepared by

Harbor Programs Branch
New York District, US Army Corps of Engineers

and

Emergency and Remedial Response Division
Region 2, US Environmental Protection Agency

21 September 2005

Newark Bay Study Area Coordination Plan
pertaining to
US Army Corps of Engineers Dredging Activities in the
Newark Bay, Kill Van Kull and Arthur Kill
and the
US Environmental Protection Agency's Remedial Investigation and Feasibility Study
of the Newark Bay Study Area

Purpose: To describe the coordination activities to take place between the US Army Corps of Engineers (USACE) and the US Environmental Protection Agency (EPA) to ensure that impacts on the EPA's remedial investigation and feasibility study, and possible future environmental remediation, of the Newark Bay Study Area from dredging activities are identified, avoided, and minimized to the fullest extent possible.

Objectives:

- a. In accordance with the stated purpose, share all available information about the agencies' respective projects consistently and in a timely fashion.
- b. Avoid to the fullest extent possible negative schedule impacts to EPA sampling and USACE dredging.
- c. Identify opportunities to support goals and objectives of each agency's projects.

Goals:

- a. Ensure that USACE dredging activities are not delayed by EPA study activities.
- b. Ensure that EPA's remedial investigation and feasibility study, and possible future environmental remediation, of the Newark Bay Study Area activities are not delayed or negatively impacted by the USACE's dredging activities in that Area.
- c. Coordinate sampling and modeling efforts prior to, during, and after dredging, when feasible, to insure integrity and efficiency of both dredging and sampling.
- d. Evaluate results from EPA studies during dredging activities that may inform the Corps on how to improve dredging activities and better understand how to manage future dredging operations more efficiently and effectively to achieve USACE Environmental Operating Principles on environmental protection and sustainability.

1. **Agency Representation:** Team will be co-chaired by the US Army Corps of Engineers – NY District and the US Environmental Protection Agency – Region 2. The team will also include representatives from the following agencies: the Port Authority of NY and New Jersey, the NRDA trustees (US Fish and Wildlife Service, and National Marine Fisheries, The New York State Department of Environmental Conservation (NYSDEC) and, the New Jersey Department of Environmental Protection (NJDEP)), the States of New York and New Jersey regulatory agencies (NJDEP and NYSDEC), and the US Coast Guard. A listing of the initial team members is attached. Agency contractors or other technical experts may be brought on as needed to address specific issues,

2. **Duration of the Team:** The team will remain active for the duration of the NBSA RI/FS.

3. Meetings

- a. The team shall meet monthly to:
 - update each other on current activities,
 - update each other on future activities,
 - identify upcoming document review requirements,
 - update the status and identify issues for on-going document reviews,
 - conduct on-board reviews of documents,
 - resolve any outstanding issues.
- b. The monthly meeting will be held at 10:00 am on the second Tuesday of the month.
- c. The team may meet in between the monthly meetings based on the needs of either agency. Team members may also be invited to attend other relevant meeting, as appropriate, such as USACE meetings with dredging contractors.
- d. A monthly meeting may be cancelled if there is no need to share information. This will be coordinated between the two co-chairpersons.
- e. The team will meet at the offices of USACE or EPA on an alternating month basis. A draft agenda will be circulated to team members for review and input approximately 1 week prior to the scheduled meeting date.
- f. Minutes of the meetings will be prepared and distributed to the team for review, comment and concurrence prior to finalization.

4. Team Members:

Thomas Shea	Project Manager	USACE Harbor Programs Branch
Scott Nicholson	Project Manager	USACE Harbor Programs Branch
Harold Hawkins	Project Manager	USACE Harbor Programs Branch
Mike Millard	Project Manager	USACE Harbor Programs Branch
Patricia Donohue	Project Manager	USACE Operations Division
Joe Olha	Project Manager	USACE Operations Division
Ron Conetta	Resident Engineer	USACE Construction Division
Sam DiDato	Project Engineer	USACE Construction Division
David Gentile	Project Engineer	USACE Construction Division
Richard Tomer	Chief	USACE Regulatory Branch
Jenine Gallo	Team Leader	USACE Environmental Analysis Branch
Ronald Pinzon	Biologist	USACE Environmental Analysis Branch
Adam Perelson	Physical Scientist	USACE Environmental Analysis Branch
Steven Weinberg	Project Engineer	USACE Engineering Division
Ben Baker	Geologist	USACE Engineering Division
Beth Nash	Envir. Engineer	USACE Operations Division
Ellen Simon	Attorney	USACE Office of Counsel
Elizabeth Butler	Project Manager	EPA Emergency and Remedial Response Division
Alice Yeh	Project Manager	EPA Emergency and Remedial Response Division
Amelia Wagner	Attorney	EPA Office of the Regional Counsel
LCDR Ernie Morton	Chief	USCG Activities NY, Vessel Traffic Service
Steve Dorrlor		Port Authority of NY & NJ
Matt Masters		Port Authority of NY & NJ

Suzanne Dietrick
Janine MacGregor
KD McGuckin
Tim Kubiak
Tom Brosnan
Reyhan Mehran

NJ Department of Environmental Protection
NJ Department of Environmental Protection
NY Department of Environmental Conservation
US Fish and Wildlife Service
NOAA
NOAA